

=====

Sequence Listing could not be accepted due to errors.

See attached Validation Report.

If you need help call the Patent Electronic Business Center at (866) 217-9197 (toll free).

Reviewer: Anne Corrigan

Timestamp: [year=2008; month=3; day=24; hr=17; min=13; sec=9; ms=748;]

=====

Reviewer Comments:

SEQUENCE LISTING

<110> ChondroGene Inc.

C.C.Liew, H.Zhang, W.Marshall

The second line in the above <110> response contains three applicants' names. Per 1.823 of the Sequence Rules, list one applicant per line.

<210> 37036

<211> 484

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 311, 338, 361, 363, 364, 365, 366, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 404, 405, 411, 412, 413, 414, 415, 416, 422, 423, 424, 426, 428, 429, 430, 431, 432, 433, 441, 445, 449, 450, 451, 461, 463, 469, 472

<223> n = A,T,C or G

<400> 37036

aaggtgctcc tcttttttct tgtcattgct ggtcaagatt actaatatth gggaaggctt 60
taaagacgca tggttatggtg ctaatgtact ttcactttta aactctagat cagaattggt 120
gacttgcatt cagaacataa atgcacaaaa tctgtacatg tctcccatca gaaagattca 180
ttggcatgcc ccaggggatt ctctctcttc atcctgtaaa ggtcaacaat aaaaaccaa 240
ttatgggggt gcttttgtca cactagcata gagaatgtgt tgaaatttaa ctttgtaagc 300
ttgtatgtgg ntgttgatct tttttttcct tacagacncc cataataaaa tatcctttcc 360
nannnnannn nnnnnnnnnn aaaaaccctt tgggggggccc ccncccccc nnnnnntttt 420

tnnntngnnn nnnttttttc ngggngccnn ntttggggcc ncnttgccnt tnnccccttg 480
gggg 484

The "n" at location 473 is not explained above.

<210> 52118

<211> 341

<212> DNA

<213> Homo sapiens

<220>

<221> misc_feature

<222> 119, 255, 259, 267, 268, 269, 270, 272, 278, 280, 283, 285,
286, 287, 297, 299, 300, 301, 303, 315

<223> n = A,T,C or G

<400> 52118

tttgaagaa gctgcaggct tattcccat gcacttgctt cctggctgca aaccttaata 60
ctttgtttct gctgtagaat ttgttagcaa acagggagtc ctgatcagca ccctttctnc 120
acatccacat gactggtttt taatgtagca ctgtggtata cattgcaaac atccgttcaa 180
aatctgagtc ggagctaaaa ataaaaaatg aaaaaacaga aaaaaaaaaa aaaaaaaaaa 240
aaaaattttg ggggnccnt gggccnnnn gntttttnan ttngnnnaat tttttntnn 300
ngncccaatt tgggnncct tgcattttcc cccattgggg g 341

The "n" at location 317 is not explained above.

<210> 58993

<213> Artificial Sequence

<221> misc_feature

<222> 1...31

<223> Synthetic primer

<400> 58993

gccagctcg aaattaaccc tcactaaagg g 31

The mandatory <211> and <212> numeric identifiers and their responses are missing above. The mandatory <220> numeric identifier is also missing (it has no response). Same errors in Sequence 58994.

Application No: 10085783 Version No: 4.0

Input Set:

Output Set:

Started: 2008-03-24 16:20:26.584
Finished: 2008-03-24 16:28:39.108
Elapsed: 0 hr(s) 8 min(s) 12 sec(s) 524 ms
Total Warnings: 2
Total Errors: 7
No. of SeqIDs Defined: 58994
Actual SeqID Count: 58994

Error code	Error Description
E 342	'n' position not defined found at POS: 473 SEQID(37036)
E 342	'n' position not defined found at POS: 317 SEQID(52118)
E 249	Order Sequence Error <210> -> <213>; Expected Mandatory Tag: <211> in SEQID (58993)
W 213	Artificial or Unknown found in <213> in SEQ ID (58993)
E 224	<220>,<223> section required as <213> has Artificial sequence or Unknown in SEQID (58993)
E 249	Order Sequence Error <210> -> <213>; Expected Mandatory Tag: <211> in SEQID (58994)
W 213	Artificial or Unknown found in <213> in SEQ ID (58994)
E 224	<220>,<223> section required as <213> has Artificial sequence or Unknown in SEQID (58994)
E 250	Structural Validation Error; Sequence listing may not be indexable

SEQUENCE LISTING

<110> ChondroGene Inc.

C.C.Liew, H.Zhang, W.Marshall

<120> Compositions and Methods Relating to Osteoarthritis

<130> 4231/2002

<140> US 10/085,783

<141> 2002-02-28

<150> US 60/305,340

<151> 2001-07-13

<150> US 60/275,017

<151> 2001-03-12

<150> US 60/271,955

<151> 2001-02-28

<160> 58994

<170> FastSEQ for Windows Version 4.0

<210> 1

<211> 377

<212> DNA

<213> Homo sapiens

<400> 1

```
cggaggtgca ggtcctggtg cttgatggtc gaggccatct cctgggccgc ctggcgcaat 60
tccgtggcta aacaggtact gctgggccgg aaggtggtgg tcgtacgtg tgaaggcatc 120
accatttctg gcaatttcta cagaaccaag ttgaagtacc tggctttcct cccaagcgg 180
atgaacacca acccttcccg gggccctat ccctttccgg gcccgaagcc gatttttttg 240
ggcgaccg gggggattt ctcccaaaaa accaagcagg ccaggccgtc tctgaccgtt 300
aaggggtgtt acggaatcca ccgccatcga atgaaaagcg atgtgttct gctgcctatg 360
gtcgtcgtac taatgca 377
```

<210> 2

<211> 209

<212> DNA

<213> Homo sapiens

<400> 2

```
ggaaaggaaa gctgtgggac catcctggca accccggtgt ttggtgggt tctagcgtag 60
cggctctgtat tcggccggtg ggggaccttg cgtcggagtg ggagggccag tttgcacca 120
agaggtggaa gaggacgggc tttaggcttg aagcgcctta gaggagccat ttttcccagg 180
atgcctgggt tgcttttata gtgtaaccc 209
```

<210> 3

<211> 499

<212> DNA

<213> Homo sapiens

<400> 3

tttgatggcg	tgatgtctca	cagaaagttc	tccgctccca	gacatgggtc	cctcggttc	60
ctgcctcgga	agcgagagc	aggcatcg	ggaggtgaa	gagcttccct	aaggatgacc	120
cgtccaagcc	ggtccacctt	acagccttcc	tggtatacaa	ggctggcatg	actcacatcg	180
tgcggggagt	cgacaggccc	ggatcccagg	tgtaacacag	aaggaggtgg	tgtagagctc	240
tttccccatt	tgagacacac	cacctatggt	gtttgtggac	tttgtgtgcc	tacgtggaca	300
cctctcgagg	tctccgcacc	ctacaagact	gtcttttgct	gagcacatca	gtgatgattg	360
cagaggcggt	tctatatgaa	tttgcataat	ctaagaggag	gctttaccag	tacttcagac	420
atgcaggatg	aggatgcaga	gcagctgaga	ggactcagca	gcatgagaga	tctccaagtc	480
atcgtgtcat	tgccacacc					499

<210> 4
 <211> 406
 <212> DNA
 <213> Homo sapiens

aaggaaatgg	ctacccaact	tgcttctcatg	cgctgtctgg	ccaactatgc	ctctcagaac	60
atcacctacc	actgcaagaa	cagcattgca	tacatggatg	aggagactgg	caacctgaaa	120
aaggctgtca	ttctacaggg	ctctaataat	gttgaactgt	tgctgagggc	aacagcaggt	180
tcacttacac	ttgttcttgt	agggtgggtg	ctttaaagg	gcaaattgat	ggggggaggc	240
acatatcga	tcacaacaca	tagagcctac	agcttgctt	cctttgtatt	cgccacttgg	300
gactagggtg	gcacgccc	ggtttcttgg	ggactggg	agtcttcaca	tagaaagctc	360
atatccatag	aaaggtagat	tttggatact	ccttcttttg	ctacgc		406

<210> 5
 <211> 440
 <212> DNA
 <213> Homo sapiens

gagacttaga	gccaaactgt	ttaagctgta	tcacccaac	aaagtatcct	ttcatgaacg	60
ggggcatgca	atagcttaag	aattgctagg	attaaattaa	ggaaagtaa	gctactcaga	120
gcagcaggtt	ccacaagcac	aaactttaca	catttgtaca	cttttgaaat	gcactacatt	180
aacacattag	agcacacatt	tgaaatacag	gttctttac	atacactgag	aggttatata	240
cactcagttt	cacacgggca	cactctatac	ctctctaaag	gtaatatctc	aggctcttat	300
aggcagagta	ttttactctc	taaatctgcc	tctctgacca	caaaaaaaaa	aaaaacctgg	360
ggggtccttc	tgggcgcgg	ggcccatcga	ttccaccgc	ggggggacca	ggaagtccc	420
caatgccta	tgtagtcata					440

<210> 6
 <211> 403
 <212> DNA
 <213> Homo sapiens

aaaaaatagt	ttttcatta	gtatttctcg	ggaggacca	aaagttaagg	tcagcttgtt	60
cactgtaatt	tctggaagga	gttactcag	accttctga	attcagatca	tctcagaagt	120
cttgagggaa	atcttgcgaa	accctcggtt	gaggacttat	gttagtttat	tgccacctca	180
cttggtgcac	cgagaactta	cttcttggga	ttaggtcact	tctttgattt	ctaataggat	240
gacttcaga	gagtgagatt	tgttatgtct	ggcttataaa	ggtaaatata	aatatataca	300
tacttaatct	aaaaaaaaa	aaaaacctcg	gggtctttt	tggacgcgg	ggccattcg	360
attccccccg	ggtggggcca	aggtaagtac	cccaatcgcc	tat		403

<210> 7
 <211> 231
 <212> DNA
 <213> Homo sapiens

<400> 7

```
ctttgcagat cttttccgac acacatgtct gaagacttat tttcaaagac agcacatttt 60
tggaactaa tctcttttcc gtaatatctt ctttatttca atgattctca gaaggcccat 120
tcaaacaacc cccccattta agggctctta gggttatagg ataaaattgg gtccttagag 180
tttagccccc agtagagcta ggaaagcccc actcgtatat ttgttccctt c 231
```

<210> 8

<211> 114

<212> DNA

<213> Homo sapiens

<400> 8

```
tgcttctatt accaggctgt aatagctggg atagtttttt atttttctct taagggtgtc 60
ttttatttagt ctgaggacag ccattttttt tttttaaggg aaaatatcag tcag 114
```

<210> 9

<211> 166

<212> DNA

<213> Homo sapiens

<400> 9

```
aagtatgatg cttttttggc ctcagagtct ctgatcaagc agattccacg aatcctcggc 60
ccaggtttaa ataaggcagg aaagttccct tccctgctca cacaaaaacg gaaacatggg 120
ggccaaagtg gattaggtga agtccccaat caagttttcc caatga 166
```

<210> 10

<211> 297

<212> DNA

<213> Homo sapiens

<400> 10

```
tttttttttt gaataataga ggcaatattt ttaatcagtt cccagataag gtcaattaga 60
aacatgcact gctaaaatgc aagttacaat tcaaatggta ccataaataa ttaggggtaca 120
cactgagcat tttcaggaat cagcttccat atcttgatcc actaaatggg gagggctctc 180
aggacacggg cccttaccac tttatacaca gagggggagg aatttaaggg tcgcctcatg 240
gacactttac agtaaatcgg gacacattta tttgagtaca ctatttagac atgtaaa 297
```

<210> 11

<211> 218

<212> DNA

<213> Homo sapiens

<400> 11

```
cttggaatgaa gagaggaccg tgaggggtccc catgatgtcg gaccctaagg ctgttttacg 60
ctatggcttg gattcagatc tcagctgcaa gattgcccag ctgcccttga ccggaaggca 120
tgagtatcat ttttttcctg ccctgtgaag tgcaccagaa tttgaccttg atagaggaga 180
gcctcaacct ccgagttcat tcatgacata gaccgaga 218
```

<210> 12

<211> 232

<212> DNA

<213> Homo sapiens

<400> 12

```
cttcagggtg atgccagggt ctatttggga atttatatac aacctgcttg ggtggagaag 60
ccattgtctt cggaaacctt ggtgttagtt gaacctgata agttactttt gtgacctgaa 120
```

gttcaccatt aaaaggggat tacccaaggc aaaatcatgg gattggtata aaagggattg 180
ttgggcaatc cattgcaata tattcaaaaa ttgaataatg ggccccataa aa 232

<210> 13

<211> 136

<212> DNA

<213> Homo sapiens

<400> 13

gcagaatcac atggcaaaag ctttgaaaat cataaagata taagttggtg tggctaagat 60
ggaaacaggg ctgattcttg attcccaatt ctcaactctc cttttcctat ttgaatttct 120
ttggggctgt agaaac 136

<210> 14

<211> 251

<212> DNA

<213> Homo sapiens

<400> 14

cttttatgta tccatcccat ctaaaaactc ttcaaactcc acttggtcag tctgaaatgc 60
agctccctgt ccaagtgcct tggagaactc acagcagcac ggcttaatca aagggtttta 120
ccagcccttg gacactattg ggaggagggc aagagtacac caatttgta aaagcaagga 180
aaccacagat gtctcttcac tagtcattta gagcatggtt atcatccaag actactctac 240
cctgcaacaa t 251

<210> 15

<211> 251

<212> DNA

<213> Homo sapiens

<400> 15

cagagatgta ctgttattag ctgggaagac caattctaac agcaaataac agtctgagac 60
tcctcatacc ctcagtgggtt agaagcatgt ctctcttgag ctacagtaga gggggaggga 120
tttttgtaga gtcaagtcac catgctggaa tgtacactga ttctctctatg atgactgctt 180
aactccccac tgtctgtcc cagagaggct ttccaatgta gctcagtaat tcctcttact 240
ctacagacag g 251

<210> 16

<211> 162

<212> DNA

<213> Homo sapiens

<400> 16

attgcatgca agtttgctga gctgaaggaa aagattgatc gcccgttctg ggtaaaaatg 60
ctggaaggat gggccctaaa attcttgaaag tctgggtgat gctgccatt gttgatatgg 120
gtcccgggca agccattttt tttttgagag gcttctcaga ct 162

<210> 17

<211> 225

<212> DNA

<213> Homo sapiens

<400> 17

gcagctgaca gaggaagccg ctcaaatacc ttcaacaata atagtggcaa tatatatata 60
gtttaagaag gctctccatt tggcatcggt taatttataat gttatgttct aagcacagct 120
ctcttctcct attttcatcc tgcaagcaac tcaaaatatt taaaataaag ttacatatg 180
tagttatttt caaatctttg ctttataagt attaagagat atgtg 225

<210> 18
<211> 215
<212> DNA
<213> Homo sapiens

<400> 18
ccctgacagc cagtatatctg acaacaggag tgtgaacagt gcagggcttc acacggtgca 60
gagagcaccg cgactgaacc acccgctga gcagatagac tctcactcaa gactacctca 120
tagcgcacac ccctcgggaa aaccaccatc cgcttcagcc ttggcacctt agaatgtatt 180
tagtacggct ttaagcagtg tggtattaca ccaca 215

<210> 19
<211> 285
<212> DNA
<213> Homo sapiens

<400> 19
gtcgccgctg cgaagggagc cgccgccatg tctgcgcata tgcaatggat ggctcgtgcgg 60
aactgctcca gtttcctgat caagaggata agcagacctc cagcactgag cccaataact 120
tgaaggcccg caatttcttc cgctacaacg gacttattca acgccaagac tgtgggctgtg 180
gagcccgag accgacggca aaaggtgttc gttggtgggt caataagcgg agattcccgc 240
cagcggaagc cttccacctt ctatgtgcgg agcaccaata acaag 285

<210> 20
<211> 307
<212> DNA
<213> Homo sapiens

<400> 20
ctcgtgccga attcggcacg agcggcacga gctggagttg gcgacttcga tattaacaag 60
gatggcgggc gccgcagcaa gtcggataag tcggggccaa gctgggccta ccgtaagatt 120
cgcatccact tatgtcagcg ctgcgccggc agccaggggc tcagggaactt cattgagaac 180
cgctacgtgg agctgaggag ggcgaatccc gacctacca tcctaatecg cgaattctcc 240
gatgtgcagc ccaagctctg gcccgtacg catttggccg gagacgaatg tcctttgaca 300
acttcag 307

<210> 21
<211> 138
<212> DNA
<213> Homo sapiens

<400> 21
gtcgcgggcg catggccaaa cgtaccaaga aagtccggat cgtcggtaaa tacggggacc 60
cgctattggg gccttccttc ggaaaattgt gtaaggaaaa ttgaaattca gccagcacgg 120
ccaagtgaca ctttgctc 138

<210> 22
<211> 138
<212> DNA
<213> Homo sapiens

<400> 22
aaagaagtag caaattatct tcagtataat ccatggtaat gtatgcagta attcaaattg 60
atctctctct caatagggtt cttaacaatc ttaaacttgg aacatcaatg gttaattttc 120
agggaccttt ttgggttt 138

<210> 23
<211> 132
<212> DNA
<213> Homo sapiens

<400> 23
ccctacgaca agaaaaagcg gatggtggtt tctgctgect caaggtcgtg cgtcttaagg 60
cctacaagga aaggttggtt aatcttgggc ggcttgctta agaaggttgc ttgaagtacc 120
aagcagttac aa 132

<210> 24
<211> 247
<212> DNA
<213> Homo sapiens

<400> 24
ctcacgcaag catggttaac gtcacctaaaa cccgccggac tttctgtaag aagtgtggca 60
agcaccaacc ccataaagtg acacagtaca aggagggcaa ggattctctg tacggccagg 120
gaaagccgcc ttatgacaag aagcagagat gggtattgtt ggcaaaactaa gccgattttc 180
cggaaaaagg ctaaaactac acagaagagt tgtgctaagg ctctagtgcg ctgagcccca 240
ctccaga 247

<210> 25
<211> 213
<212> DNA
<213> Homo sapiens

<400> 25
gtttgagaag tccccctgc ggggtgaagaa ctctgggac tggtctgcgt atgacttccg 60
gagcggcacc cacaacatgt accgggaata ccgggacctg aacaacgcag gcgctgtcac 120
ccagtgttac cgagacatgg gtgcccggca ccgcggccga gcccaattca ttcagatcat 180
gtaagggttga ggagatcgcg gccagcaagt gtc 213

<210> 26
<211> 237
<212> DNA
<213> Homo sapiens

<400> 26
gaaaaatgag tatgttcctt ctcaggagag ctcttagaca acaagcaaag aatgtcaatg 60
aaatttttaa gtgctcagtg ttccaggcca gagtacagag ggagggacac tttgctgtct 120
ttcagtcctt tctttttaat tgtattgatt cttttcctcg gtaataaata agtgcatact 180
agtgtttatt aaggaaagac aggtacaagc caaattgtat tcatttaatc atattcg 237

<210> 27
<211> 132
<212> DNA
<213> Homo sapiens

<400> 27
cctgtgccga aattcggcac gaggettgcg ggaatcccat tcacccttgc ctttctcacc 60
taaatectgc agcctggctt cctgacccaa tgaatccctt aggtgaattt cgtcagttca 120
agagccctt gg 132

<210> 28
<211> 110
<212> DNA

<213> Homo sapiens

<400> 28

```
cagagatgaa ctgaggtcct tgttttgttt tgttcataat acaaaggtgc taattaatag 60
tatttcagat acttgaggaa tgttgatggt cctagaggaa tttgagaggg 110
```

<210> 29

<211> 257

<212> DNA

<213> Homo sapiens

<400> 29

```
gccgttctgg taaaaagctg gaagatggcc ctaaattctt gaagtctggt gatgctgcc 60
ttgttgatat ggggttcctgg caagcccatg tgtgttgagg agcttctcaa gctatccacc 120
tttggttcgg tttgctgttc gggatatgag gacaagacaa gtgcgggggg tgatcatcaa 180
ggcaggtggc aaggaggctg ctgggagctg gcaagggtcac aagtctgccc agaaagctca 240
gagggctaaa tgaatat 257
```

<210> 30

<211> 361

<212> DNA

<213> Homo sapiens

<400> 30

```
tgtcaatctt gcctggacag caggaaacag taacacgcgc ttcggaatag cagccaagac 60
tcagattgac cctgacggct gcttctcggc taaagtgaac aacttcacgc ctgatagggt 120
tagggataca actcaggact ctaaagccag gtattaaact gacaactgtc agctcttctg 180
aatggcaaga acgtcaatgc tgggtggccac aagcttggtc taggactgga atttcaagca 240
taaatagaata ctgtacattg ttttaatttta aactatttgc agcatagcta ccttcagagt 300
gtagtgatc tttaatgttg tatgtctgta tgcagtattg ctaatatgtt agccctcaga 360
t 361
```

<210> 31

<211> 398

<212> DNA

<213> Homo sapiens

<400> 31

```
ccggcacaga tgaaaaggct cttattgaaa tcctggccac tcggaccaat gctgaaatcc 60
gggccatcaa tgaggcctat aaggaggact atcacaagtc cctggaggat gctctgagct 120
cagacacatc tggccacttc aggaggatcc tcatctctct ggccacgggg catcgtgagg 180
aggaggagaa acctggacag gcacggaaga tgccagggtgc tcctgagatc ttggaaatag 240
cagacacacc agtgagacaa acttccttga gacacgtttc atgacgatct ctctaccgga 300
gctatcgaac ctccgagagt cttcaggagt tcatcaagat gacactatga cgtgagacac 360
atcagaggag atgtctggga tgtaggaatg catctgtg 398
```

<210> 32

<211> 210

<212> DNA

<213> Homo sapiens

<400> 32

```
cggcacgagt agtgacagac cgttggcatg ttagaactaa ggaaggggga aaacttatga 60
agccctgttc tttcactaaa ttacctgctg gtatttgacc aatgcaaata aaccaggcaa 120
tatccagtgt ttggaatatt aaagtaattc atggattaat ttttagtggg ttagagcctc 180
taattaaagc ttaatatata ttaagtgcac 210
```

<210> 33
<211> 275
<212> DNA
<213> Homo sapiens

<400> 33
ggcttgtgca gcaatggcca agatcaaggc tcgagatctt cgcgggaaga agaaggagga 60
gctgctgaaa cagctggacg acctgaagggt ggagctgttc ccagctgcgc gtcgccaaag 120
tacaggcgggt cggcctccaa gctctctaag atccgagtcg tccggaaatc cattgcccgt 180
tttctaacag ttattaacca gactcagaag gaaacctcag gaaattctac aaggcaagag 240
gtacaagccc ttggacctgc ggcctaagag acacg 275

<210> 34
<211> 131
<212> DNA
<213> Homo sapiens

<400> 34
cagtcttgct ttattcatcc tccatctcaa aatgaacttg gaattaaata ttgtaagata 60
tgtataatgc tggccatttt aaaggggttt tctcaaaagg taaacctttt gttattgact 120
tgtgtttttg c 131

<210> 35
<211> 155
<212> DNA
<213> Homo sapiens

<400> 35
gtggcgataa gggagagccc ggtgaaaagg ggcccagagg tcttcctggc ttaaagggga 60
cacaatggat tgcaagggtct gcctgggtat cggctgggtca accatgggtg atcaaggggtg 120
cctcctggct ccgtgggggc ctcttggtcc ttggg 155

<210> 36
<211> 150
<212> DNA
<213> Homo sapiens

<400> 36
gtcagctctg aatgaggagg ggagaagccc ctgggggtctt tctttgaaag gaatcccgt 60
gcttgagggc ttgcctccct tcaatggtgt tccgtttcgt ttcttttccc tgaccggact 120
tttttatatt caagaggtac ctattgcaaa 150

<210> 37
<211> 199
<212> DNA
<213> Homo sapiens

<400> 37
ctgaaatcta gcagagttaa actcttctgc ctccatgtct gtcacttata attcaggttc 60
tgctgtttggc ttcagaacat gagcaggagg atcgttttat gctaggttat tgcaatcaat 120
ggtgaaactc aacttaggga aagggttcca atgtataagg caatgggctg cttctcccca 180
atcctcccta acaatttgt 199

<210> 38
<211> 315
<212> DNA
<213> Homo sapiens

<400> 38
catcatctcc tgtgatcgag gatgctcgac acccacacaa ataccgcatg ctcacgcaa 60
tgggtgatgt gatctatcct gaatgtggcc cagccagtcc cagaccccga gttgtggccc 120
ttaatgccca caccttcctt gcgtaatgga ggacaatttg tgatttccat taaggccaac 180
ctcaattact tcacaagcgt aagccgaggc cgggtgtttt ctcggaagtg aaaaggatgc 240
aacaaggaga caatgaggcc gcaggagcag gttgaccctt agccaatatt aaagagacca 300
attccgtgcc gtggg 315

<210> 39
<211> 160
<212> DNA
<213> Homo sapiens

<400> 39
ctaactcttc tgacacgtcc ttcgcagttc ttgagcgctt gtgcattact ttcctatgag 60
gggtctgtgt tcacagcaac ctgacagtgg cgttcggggg cgttggtccc gtacgtagag 120
gacgtggagc gtcacaacag gcagtggagc ccaacgtcag 160

<210> 40
<211> 220
<212> DNA
<213> Homo sapiens

<400> 40
gtaagattgg cctaagagcc ctgcctgacc acgtgagcat tgtggaccca agatgagata 60
ctgcccacca ccccatctc agaacagaag ggtggggagc cagagcccgc ctgccatgcc 120
ccagccagtc ccaacagcat aacagggctt tcttggcagc tgtattcttg agtctggatg 180
ttgctctgta aggaccttta gtaaaatttt gtacaaagac 220

<210> 41
<211> 355
<212> DNA
<213> Homo sapiens

<400> 41
cctcgtccga ggtcacacct tcaaactctg tctctaaggc cagaaccaa gtgggccttc 60
tgtgaacagg tccttgggtc acttctcacc ttcctaagct gatggaggcc tggcttagca 120
gccggaagcc taccaggcac tgtgcactat gagcatgtgt kcaaagagta ctctctctga 180
gccaaagcat gectgtcat ctccctgtg gcagaaggga gccctgaggg ggcctcttcc 240
ataggctggg cccgagcatt gagtcagggt ggctgggtag gctttggccg cacctcagag 300
gtccagacat actttgatga gtaatttccc catctgggta ctatttctg gaagg 355

<210> 42
<211> 330
<212> DNA
<213> Homo sapiens

<400> 42
gcctatctgg acgaagcagc tggaacctc aagaaggccc tgetcatcca gggctccaat 60
gacgtggaga tccgggcaga gggcaatagc aggttcacgt aactgccct gaaggattgg 120
ctgcacgraa cataccggtg agttgggcaa gacttttata gagtaccggt cacagaagac 180
ctcacgcctc cccatcattt acatttcacc catggacata ggagggcccg agcagggaatt 240
cggttttgac atagggcccg tcttcttttt gtaaaacctg aaccagaaa caacacattc 300
tttgcaaacc aaaggaccaa gtatttccat 330

<210> 43

<211> 210
<212> DNA
<213> Homo sapiens

<220>
<221> misc_feature
<222> 18
<223> n = A,T,C or G

<400> 43
gggacagtca gccgcatntt cttttgcgtc gcagccgagc cacatcgctc agacaccatg 60
gggaaggtga aggtcggrgt caacggattt ggtcgtattg ggcgcttggg caccagggct 120
gcttttaact ctggtaaagt ggatattttt gccatcaatg acccttcaat tgacctaaact 180
tacctgggtt acatttccca atatgttccc 210

<210> 44
<211> 240
<212> DNA
<213> Homo sapiens

<400> 44
gtgaacactg agaatactga gtcaggatta gctcttcaca cttttccacc cttttctgag 60
catgtagttg gtgggttgac ctgtcaaggt catcctggat gatctagact tgtttctctc 120
ttcttttccc ttcagtatgc cttagggatc acagggatga atataggggc accgtttata 180
cctaaggatc caccttatac tttccttagg gttcacacat tagggtttta aggaaagggg 240

<210> 45
<211> 139
<212> DNA
<213> Homo sapiens

<400> 45
acttctgaag atgtccttga tgtgcagctg gcattccttc gacttctctc caaccgagct 60
tcccagaaca tacacatatc actgccaaaa atagcattgc atacatggat caggccagtg 120
ggaatgtaaa gaaggccct 139

<210> 46
<211> 320
<212> DNA
<213> Homo sapiens

<400> 46
gttcccaagg cagtcacggc ttgaagtgag gccagtgcc caaccggggg atgaatttta 60
gtttttactt ttaataaatt tgagtagcca ctgtgttggt tggccactga acctacgggg 120
cagtgcagcc atagtgactc ctactatacg gagccgtctt cccacatcct tccttagctg 180
tcacttctcc tggagcagga gacagctcca ggtcctgcga agtgtgggca gttcttacct 240
cctggggctg agctcatgtg gaaaaccttt gtgcagggtc atgggggctg accagccgga 300
ccggagggaat cctagggttag 320

<210> 47
<211> 136
<212> DNA
<213> Homo sapiens

<400> 47
ctcagtggaa gactcagagt ctgaacctg gtcagcctga cgtagagcc tccgatg